Experimental NELAC PT

Fields of Proficiency Testing with PTRLs Drinking Water

Effective June 1, 2005

Matrix	EPA	NELAC Analyte Code	Analyte	Conc Range	Acceptance Criteria ^{2,3,4,5}				NELAC PTRL ⁶
	Analyte Code				а	b	С	d	-
			Misc Analytes	mg/L					mg/L
Orinking Water		1045	Hexavalent Chromium (VI)	5 to 50	0.9976	0.0479	0.0491	0.0441	4.5
Orinking Water		1620	Corrosivity	-4 to +4 SI units	± 0.4 SI uni	ts fixed acc	eptance lim	it	Not Applicable
Orinking Water		1710	Dissolved Organic Carbon (DOC)	1.2 to 4.9	0.9873	0.0565	0.0643	0.0769	0.93
Orinking Water		1895	Perchlorate	4 to 20 μg/L	0.9644	-0.0135	0.0690	-0.0012	3.2 µg/L
Orinking Water		1990	Silica as SiO ₂	5 to 50	±15% fixed acceptance limit				4.2
Orinking Water		2025	Surfactants - MBAS	0.05 to 1.0	0.9535	0.0170 0.0721 0.014			0.028
Drinking Water		2060	UV 254 Absorbance	0.02 to 0.7 cm-1	1.0976	-0.0042	0.1097	0.0043	0.0047 cm-1
			VOCs ¹	μg/L					μg/L
Orinking Water		4370	T-amylmethylether (TAME)	5 to 50	+40% fi	ved accenta	nce limit		3.0
Orinking Water Orinking Water		4420	Tert-Butyl Alcohol	5 to 50	±40% fixed acceptance limit ±40% fixed acceptance limit				3.0
Orinking Water		4770	Ethyl-t-butylether (ETBE)	5 to 50	±40% fixed acceptance limit				3.0
Orinking Water		5180	1,2,3-Trichloropropane ⁷	0.2 to 2.0	±40% fixed acceptance limit				0.12
Orinking Water		5185	Trichlorotrifluoroethane (Freon 113)	5 to 50		xed accepta			3.0
Drinking Water		9375	Di-isopropylether (DIPE)	5 to 50		xed accepta			3.0
			PAH/Phthalates ¹	μg/L					μg/L
Orinking Water		5500	Acenaphthene	1 to 10	±50% fix	xed accepta	nce limit		0.50
Orinking Water		5505	Acenaphthylene	1 to 10		xed accepta			0.50
Orinking Water		5555	Anthracene	1 to 10		xed accepta			0.50
Orinking Water		5575	Benzo(a)anthracene	1 to 10	±50% fix	xed accepta	ance limit		0.50
Orinking Water		5585	Benzo(b)fluoranthene	1 to 10		xed accepta			0.50
Orinking Water		5590	Benzo (g,h,i)perylene	1 to 10		xed accepta			0.50
Orinking Water		5600	Benzo(k)fluoranthene	1 to 10		xed accepta			0.50
Orinking Water		5670	Butylbenzylphthalate	10 to 50		xed accepta			4.0
Orinking Water		5855	Chrysene	1 to 10		xed accepta			0.50
Orinking Water		5895	Dibenz(a,h)anthracene	1 to 10		xed accepta			0.50
Orinking Water		5925	Di-n-butylphthalate	10 to 50		xed accepta			4.0
Orinking Water		6070	Diethylphthalate	10 to 50		xed accepta			4.0
Orinking Water		6135	Dimethylphthalate	10 to 50		xed accepta			4.0
Orinking Water		6200	Di-n-octylphthalate	10 to 50		xed accepta			4.0
Orinking Water		6265	Fluoranthene	1 to 10		xed accepta			0.50
Orinking Water		6270	Fluorene	1 to 10		xed accepta			0.50
Orinking Water		6315	Indeno(1,2,3-cd)pyrene	1 to 10		xed accepta			0.50 1.2
Orinking Water		5005	Naphthalene	2 to 50		xed accepta			
Orinking Water Orinking Water		6615 6665	Phenanthrene Pyrene	1 to 10 1 to 10	±50% fix	xed accepta			0.50 0.50

Experimental NELAC PT Fields of Proficiency Testing with PTRLs Drinking Water Effective June 1, 2005 Acceptance Criteria^{2,3,4,5} NELAC PTRL6 **EPA NELAC** Matrix Analyte Conc Range Analyte Analyte b d а Code Code Pesticides¹ µg/L μg/L **Drinking Water Bromacil** ±45% fixed acceptance limit 7130 2 to 20 1.1 **Drinking Water** 7875 Molinate (Ordram) 5 to 50 ±45% fixed acceptance limit 2.7 Herbicides¹ μg/L μg/L **Drinking Water** 8530 Bentazon 10 to 140 0.9052 -0.1670 0.2369 1.2766 1.5 **Drinking Water** 8540 Chloramben 20 to 100 ±50% fixed acceptance limit 10 **Drinking Water** Dacthal diacid (DCPA) -2.7986 0.4470 -0.1212 2.0 8550 20 to 100 0.8791 **Drinking Water** 8600 3.5-Dichlorobenzoic acid 10 to 100 ±50% fixed acceptance limit 5.0 **Drinking Water** 8605 Dichloroprop 10 to 100 0.9026 -0.7647 0.1517 0.2149 4.7 **Drinking Water** 9528 4.0 Paraguat 8 to 100 ±50% fixed acceptance limit Carbamates μg/L µg/L **Drinking Water** 7800 Methiocarb 0.9192 1.6720 0.0476 1.8277 22 30 to 140 **Drinking Water** 8080 **Baygon** 30 to 140 1.0298 -1.9353 0.0893 0.2199 23 1) For volatile, PAH/Phthalate, pesticide, and herbicide standards, providers must include a minimum number of analytes using the same criteria described in Chapter 2, Appendix B, Section B.1.2. 2) The acceptance criteria found in the EPA's National Standards for Water Proficiency Testing Studies are incorporated herein by reference. Acceptance criteria for FoPTs not included in the National Standards are presented in this table. Acceptance limits are set at the Mean ± 2 SD (Mean = $a^*T + b$; SD = $c^*T + d$ where T is the assigned value). 3) If the lower acceptance limit generated using the criteria contained in this table is less than (<) 10% of the assigned value, the lower acceptance limits are set at 10% of the assigned value. 4) If the lower acceptance limit generated using the criteria contained in this table is greater than (>) 90% of the assigned value, the lower acceptance limits are set at 90% of the assigned value. 5) If the upper acceptance limit generated using the criteria contained in this table is less than (<) 110% of the assigned value, the upper acceptance limits are set at 110% of the assigned value. 6) NELAC Proficiency Testing Reporting Limits (PTRLs) are provided as guidance to laboratories analyzing NELAC PT samples. These levels are the lowest acceptable results that could be obtained from the lowest spike level for each analyte. The laboratory should report any positive result down to the PTRL. It is recognized that in some cases (especially for analytes that typically exhibit low recovery) the PTRL may be below the standard laboratory reporting limit. However, the laboratory should use a method that is sensitive enough to generate results at the PTRL shown. NELAC PTRLs are also provided as guidance to PT Providers. At a minimum for all analytes with an assigned value equal to "0", the PT Provider should verify that the sample does not contain the analyte at a concentration greater than or equal to the PTRL.

7) The acceptance criteria for 1,2,3-Trichloropropane are technology specific for gas chromatography-electron capture detection.